

**House Armed Services Committee**  
**Wilson, Frederica S.(D-FL) - Community Project Funding Requests**

<b>ID</b>	<b>Request Project Name</b>	<b>Recipient Name</b>	<b>Request Member's Request (in thousands, \$000)</b>
<a href="#">71</a>	SOUTHCOM Enhanced Domain Awareness (EDA) Initiative	Florida International University	\$1,300
<a href="#">72</a>	Cold Spray and Rapid Deposition Lab	Florida International University	\$1,300
<a href="#">73</a>	Future Nano- and Micro-Fabrication - Advanced Materials Engineering Research Institute	Florida International University	\$6,800
<a href="#">74</a>	Additive Manufacturing and Ultra-High Performance Concrete	Florida International University	\$10,000
<a href="#">82</a>	Data-Informed Tactical Decision-Making: Emergency Planning, Preparedness, and Response Execution for South Florida's Small Business Community	St. Thomas University	\$1,250
<a href="#">104</a>	Neural-enabled Prosthetics: Virtual and Remote Reality	Florida International University	\$3,000
<a href="#">106</a>	HBCU Training for the Future of Aerospace	Florida Memorial University	\$1,000
<a href="#">108</a>	Florida Memorial University Department of Natural Sciences STEM Equipment	Florida Memorial University	\$400
<a href="#">109</a>	Florida Memorial Avionics Smart Scholars	Florida Memorial University	\$1,000
<a href="#">111</a>	HIV/AIDS Research as Centers for AIDS Research	University of Miami	\$2,000

**Request ID: 71**

Project Name:	SOUTHCOM Enhanced Domain Awareness (EDA) Initiative	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$1,300
Justification:	<p>Launching a Central American Open Source Research Initiative/Coalition (CAOSRI) will complement current USG research capacity and provide U.S. leaders with innovative, unique, real-time analysis that helps advance the important goals of: promoting prosperity; enhancing security; reducing crime and gang activity; and improving governance. Specifically, such an initiative could:</p> <ul style="list-style-type: none"> <li>• Establish a secure, virtual technology platform that facilitates information sharing.</li> <li>• Foster analytic exchanges between U.S. and Latin America stakeholders.</li> <li>• Create a shared understanding of critical security challenges facing Latin America.</li> <li>• Enhance U.S. and Latin American research and analytic capacities.</li> <li>• Cultivating future U.S. and Latin American national security workforces.</li> <li>• A community of thinking to promote a political culture that demands security and commitment to democracy from the institutions.</li> <li>• Standardized indicators and research capability that serve to monitor security and the administration of justice in the region.</li> <li>• Capability to monitor disinformation as it relates to USG objectives in the region.</li> <li>• Thought and practice partners to aid the Department of Defense in incubating and testing advancements.</li> <li>• Develop pipelines of undergraduate talent from Miami, Florida's HBCU into the graduate programs at the community's Hispanic-Serving Institution, Florida International University.</li> </ul>		
Project Purpose:	<p>The Enhanced Domain Awareness (EDA) Initiative takes a whole of hemisphere approach, bringing together the best from across academia, government, civil society, think tanks, private sector, and multi-lateral organizations, to provide data and analytic power to support U.S. Department of Defense and partner nation decision makers with real time information and analysis. In addition to providing immediate access to a network of non-U.S. Department of Defense stakeholders, this project provides a repository of collected data, analytic tools, research, training and education, and a collaborative community that DOD can tap into for quick answers to decision-maker inquiries in areas including transnational organized crime, statistical analysis, critical infrastructure and resources, energy, environment, tropical diseases, national security, disaster risk management and much more. Specifically, this initiative will:</p> <ul style="list-style-type: none"> <li>• Provide the department with an independent, unbiased, research partner to analyze the impact of security challenges/investments in Latin America and the Caribbean.</li> <li>• Enhance U.S. and Latin American research and analytic capacities.</li> <li>• Establish a secure, virtual technology platform that facilitates information sharing.</li> <li>• Foster analytic exchanges between U.S. and Latin American stakeholders.</li> <li>• Create a shared understanding of critical security challenges facing Latin America.</li> <li>• Cultivate future national security workforces.</li> </ul>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami-Dade County	Project State:	FL
Recipient Name:	Florida International University	Recipient Mailing Address:	11200 SW 8 Street Miami, FL 33199



June 15, 2021

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for SOUTHCOM Enhanced Domain Awareness (EDA) Initiative in fiscal year 2022. The entity to receive funding for this project is Florida International University located at 11200 SW 8 Street Miami, FL 33199.

The funding would be used for the Enhanced Domain Awareness (EDA) Initiative. EDA takes a whole of hemisphere approach, bringing together the best from across academia, government, civil society, think tanks, private sector, and multi-lateral organizations, to provide data and analytic power to support U.S. Department of Defense and partner nation decision makers with real time information and analysis. In addition to providing immediate access to a network of non-U.S. Department of Defense stakeholders, this project provides a repository of collected data, analytic tools, research, training and education, and a collaborative community that DOD can tap into for quick answers to decision-maker inquiries in areas including transnational organized crime, statistical analysis, critical infrastructure and resources, energy, environment, tropical diseases, national security, disaster risk management and much more.

Specifically, this initiative will:

- Provide the department with an independent, unbiased, research partner to analyze the impact of security challenges/investments in Latin America and the Caribbean.
- Enhance U.S. and Latin American research and analytic capacities.
- Establish a secure, virtual technology platform that facilitates information sharing.
- Foster analytic exchanges between U.S. and Latin American stakeholders.
- Create a shared understanding of critical security challenges facing Latin America.
- Cultivate future national security workforces.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in blue ink that reads "Frederica S. Wilson". The signature is written in a cursive style with a large, stylized 'F' and 'W'.

Frederica S. Wilson  
Member of Congress

**Request ID: 72**

Project Name:	Cold Spray and Rapid Deposition Lab	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$1,300
Justification:	<p>South Florida is known as the birthplace of commercial aviation and a major hub for Maintenance, repair and operations (MRO) industry. Manufacturing and repairing structural components is the most important branch of cold spray technology. Being close to the end market, ColRAD provides great opportunities in communicating between university researchers and end-market users. It can also offer essential trainings and job opportunities to local students and technicians. This program will help develop pipelines of undergraduate talent from Miami, Florida's HBCU into the graduate programs at the community's Hispanic-Serving Institution, Florida International University.</p> <ul style="list-style-type: none"> <li>• FIU, CEC and PI Agarwal's lab offers several summer internships to K-12 students and teachers to promote STEM as a future career. ColRAD is a great addition to this effort by showcasing the state-of-art cold spray and rapid deposition facilities and inspiring young minds in Miami area to become future engineers and scientists of the USA. The training of high school teachers in ColRAD will lead to "training of trainers" as teachers have maximum influence on students. FIU's College of Engineering and Computing starts hosting a pioneer annual event, "Engineering Expo", that attract thousands of K-12 students from the community to FIU campus and expose them to the cutting-edge research and advancements in STEM. ColRAD will be a centerpiece of Engineering Expo.</li> <li>• FIU PI Agarwal is working with Miami Dade Police Officer (who is also an adjunct faculty at FIU) to develop bullet resistant protective coatings for armor for security personnel and schools. ColRAD is developing those advanced materials and coatings.</li> <li>• American Welding Society (AWS) is a non-profit organization with over 100 years history. It is headquartered in Doral, FL, 5 miles from FIU! AWS serves over 70,000 members worldwide includes welder, business leaders, sale and service teams, education institution and students. AWS has shown great interests in collaborating with local institutions. Dr. Arvind Agarwal and his Plasma Forming Laboratory have previously collaborated with AWS and featured in their quarterly publication "Spray Time". Dr. Agarwal received multiple inquires and interests after the magazine is published and led to further research collaborations and grant opportunities. One major component of ColRAD efforts is to integrate modern computer-aided robotic programming into conventional manufacturing techniques, such as welding and spraying, and develop advanced manufacturing to meet the needs of modern manufacturing: faster and greener. ColRAD and AWS plans to form a strong workforce in introducing such technologies to the local communities through various workshop, seminars, and conferences. In the meantime, our own highly trained students and technicians can be advocated to the globe industries through network of AWS. ColRAD is working with FIU alumni in NASA to develop protective coatings for the next lunar mission Artemis.</li> </ul>		
Project Purpose:	<p>The purpose of the project is to build a state-of-the-art advanced manufacturing laboratory based on Cold Spray and Rapid Deposition Techniques that will advance Army Technologies and fundamental science and research. The development of high deposition structural alloys and novel additive manufacturing processing techniques from computational models is essential toward the prediction of material properties and the implementation of new structural alloys into Army weapons systems. The shift of manufacturing from the United States to China and India is a leading threat to the U.S. military advantage, according to the Defense Science Board in its "Technology and Innovation Enablers for Superiority in 2030" report. The transfer of manufacturing to foreign nations also affects U.S. technology leadership by enabling adversaries to learn a technology and then gain the capability to improve on it. An additional threat to defense capabilities from offshore manufacturing is the potential for compromise of the supply chain for key weapons systems components. The rise of technically and economically strong foreign adversaries will challenge U.S. superiority in speed, stealth and the precision of weapons systems. Other countries are likely to develop counters to some or all of the foundation technologies on which the U.S. has come to rely.</p>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami-Dade County	Project State:	FL
Recipient Name:	Florida International University	Recipient Mailing Address:	11200 SW 8 Street Miami, FL 33199



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The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Cold Spray and Rapid Deposition Lab in fiscal year 2022. The entity to receive funding for this project is Florida International University located at 11200 SW 8 Street Miami, FL 33199.

The funding would be used to build a state-of-the-art advanced manufacturing laboratory based on Cold Spray and Rapid Deposition Techniques that will advance Army Technologies and fundamental science and research. The development of high deposition structural alloys and novel additive manufacturing processing techniques from computational models is essential toward the prediction of material properties and the implementation of new structural alloys into Army weapons systems. The shift of manufacturing from the United States to China and India is a leading threat to the U.S. military advantage, according to the Defense Science Board in its "Technology and Innovation Enablers for Superiority in 2030" report. The transfer of manufacturing to foreign nations also affects U.S. technology leadership by enabling adversaries to learn a technology and then gain the capability to improve on it. An additional threat to defense capabilities from offshore manufacturing is the potential for compromise of the supply chain for key weapons systems components. The rise of technically and economically strong foreign adversaries will challenge U.S. superiority in speed, stealth and the precision of weapons systems. Other countries are likely to develop counters to some or all of the foundation technologies on which the U.S. has come to rely.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in blue ink that reads "Frederica S. Wilson". The script is cursive and fluid, with the first name "Frederica" being more prominent than the last name "Wilson".

Frederica S. Wilson  
Member of Congress

**Request ID: 73**

Project Name:	Future Nano- and Micro-Fabrication - Advanced Materials Engineering Research Institute	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$6,800
Justification:	This project will help moving innovations out of the university and into the marketplace and will ensure that America remains the technologically preeminent nation. Additionally, this project will help develop pipelines of undergraduate talent from Miami, Florida's HBCU into the graduate programs at the community's Hispanic-Serving Institution, Florida International University.		
Project Purpose:	<p>Future research and training of our students will require more prevalent and standard use of nano and microfabrication equipment across all areas of manufacturing, including additive and hybrid manufacturing. Such equipment will enable the development of nano and micro satellites, smaller UAV platforms, future high data rate secure communication links, including 5G and space borne platforms, quantum computing materials and communications, smart materials, and nano composites with novel multi-functionalities needed for ubiquitous sensing, imaging, healthcare, infrastructure and security assessments, advanced manufacturing of future electronics and data gathering devices, agricultural and environment support, and space missions, to mention a few. This will help moving innovations out of the university and into the marketplace and will ensure that America remains the technologically preeminent nation. Specifically, this project will benefit research in:</p> <ul style="list-style-type: none"> <li>• 5G/6G devices, nano and micro satellites, and manufacturing automation</li> <li>• Metal 3D printed circuits for antenna, wearable electronics, and biomedical devices</li> <li>• Compact, high performance, real-time millimeter wave camera system for airport and public area security</li> <li>• Non-fossil fuel energy materials and devices</li> <li>• Quantum computing materials</li> </ul>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami-Dade County	Project State:	FL
Recipient Name:	Florida International University	Recipient Mailing Address:	11200 SW 8 Street Miami, FL 33199





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Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Future Nano- and Micro-Fabrication - Advanced Materials Engineering Research Institute in fiscal year 2022. The entity to receive funding for this project is Florida International University located at 11200 SW 8 Street Miami, FL 33199.

The funding would be used for future research and training of FIU's students. The research and training will require more prevalent and standard use of nano and microfabrication equipment across all areas of manufacturing, including additive and hybrid manufacturing. Such equipment will enable the development of nano and micro satellites, smaller UAV platforms, future high data rate secure communication links, including 5G and space borne platforms, quantum computing materials and communications, smart materials, and nano composites with novel multi-functionalities needed for ubiquitous sensing, imaging, healthcare, infrastructure and security assessments, advanced manufacturing of future electronics and data gathering devices, agricultural and environment support, and space missions, to mention a few. This will help moving innovations out of the university and into the marketplace and will ensure that America remains the technologically preeminent nation. Specifically, this project will benefit research in:

- 5G/6G devices, nano and micro satellites, and manufacturing automation
- Metal 3D printed circuits for antenna, wearable electronics, and biomedical devices
- Compact, high performance, real-time millimeter wave camera system for airport and public area security
- Non-fossil fuel energy materials and devices
- Quantum computing materials

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

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Frederica S. Wilson  
Member of Congress

**Request ID: 74**

<b>Project Name:</b>	Additive Manufacturing and Ultra-High Performance Concrete	<b>Request Nature:</b>	Community Project Funding
<b>Member Name:</b>	Wilson, Frederica S.(D-FL)	<b>Member's Request:</b> (in thousands, \$000)	\$10,000
<b>Justification:</b>	<p>Fortifying our country's military installations must be a top priority as extreme events and shifts in environmental conditions pose real threats to military readiness and response capabilities. FIU is a leader in developing resilient building and related technologies as shown by its own federally designated research centers that provide solutions to government and industry problems from wind, storm surge, and rising sea level impacts on housing, infrastructure, and transportation systems. An important aspect of FIU's leadership is the development of technologies that can upgrade existing deficient infrastructure, at a fraction of time needed and at less than 10 percent cost of completely replacing them.</p> <p>Researchers at FIU are developing advanced additive manufacturing (3D Printing) methods and equipment, with focus on the construction industry. The 3D printing techniques are being used to construct innovative bridge systems and housing components in manners that minimize the traffic interruption and enhances the public and consumer safety. In particular, customized 3D printers are developed that allows use of advanced materials, such as Ultra High-Performance Concrete (UHPC) in bridge construction.</p> <p>In particular, customized 3D printers have been developed that allow use of advanced materials, such as Ultra High-Performance Concrete (UHPC) in bridge construction. These techniques utilize several technologies, including shotcrete, where advanced materials are sprayed at high pressure and deposited on horizontal, vertical or any sloped surfaces, strengthening and making them last longer. This approach eliminates the need for having heavy construction equipment onsite and further, result in infrastructure that poses properties and characteristics that are even better than these infrastructures at their original conditions. The address the concern for relatively high cost of the material, non-proprietary UHPC mixes are developed that cost about 30 percent of the proprietary versions of currently available proprietary UHPX mixes. The non-proprietary UHPC mixes developed have same properties and performances as their proprietary counterpart.</p> <p>Improving and assuring the Nation's military readiness to respond to all risks and threats is an appropriate use of taxpayer resources. This request will focus on developing and testing resilient infrastructure and related systems that the military would use to create resilient and sustainable installations, including base housing for its personnel and their families. Additionally, the program will help develop pipelines of undergraduate talent from Miami, Florida's HBCU into the graduate programs at the community's Hispanic-Serving Institution, Florida International University.</p>		
<b>Project Purpose:</b>	<p>By accelerating Additive Manufacturing, Engineering and related solutions for aging infrastructure and vulnerable installations, the Department of Defense can ensure that installations are defense-ready and meeting the needs of our troops.</p> <ul style="list-style-type: none"> <li>o Additive Manufacturing's (AM) ability to produce customized lightweight materials and parts is already enabling the creation of new military technologies that significantly strengthen U.S. defensive capabilities.</li> <li>o The need exists to accelerate the development of advanced additive manufacturing (3D Printing) methods and equipment, with focus on the built defense environment. 3D printing techniques are being used to construct innovative bridge systems and housing components in manners that minimize the traffic interruption and enhances the public and consumer safety and hold the promise to effectively meet a great need for DOD.</li> <li>o This would also address the need for resilient structures with shifting threats to our climate, as analyzed in the 2016 Report "Regional Sea Level Scenarios for Coastal Risk Management, prepared by the Coastal Assessment Regional Scenario Working Group.</li> </ul>		
<b>Member Website Link:</b>	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
<b>Project City or County:</b>	Miami-Dade	<b>Project State:</b>	FL
<b>Recipient Name:</b>	Florida International University	<b>Recipient Mailing Address:</b>	11200 SW 8 Street Miami, FL 33199



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Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Additive Manufacturing and Ultra-High Performance Concrete in fiscal year 2022. The entity to receive funding for this project is Florida International University located at 11200 SW 8 Street Miami, FL 33199.

The funding would be used to accelerate Additive Manufacturing, Engineering and related solutions for aging infrastructure and vulnerable installations, the Department of Defense can ensure that installations are defense-ready and meeting the needs of our troops.

- Additive Manufacturing's (AM) ability to produce customized lightweight materials and parts is already enabling the creation of new military technologies that significantly strengthen U.S. defensive capabilities.
- The need exists to accelerate the development of advanced additive manufacturing (3D Printing) methods and equipment, with focus on the built defense environment. 3D printing techniques are being used to construct innovative bridge systems and housing components in manners that minimize the traffic interruption and enhances the public and consumer safety and hold the promise to effectively meet a great need for DOD.
- This would also address the need for resilient structures with shifting threats to our climate, as analyzed in the 2016 Report "Regional Sea Level Scenarios for Coastal Risk Management, prepared by the Coastal Assessment Regional Scenario Working Group.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

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Frederica S. Wilson  
Member of Congress

Request ID: 82			
Project Name:	Data-Informed Tactical Decision-Making: Emergency Planning, Preparedness, and Response Execution for South Florida's Small Business Community	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$1,250
Justification:	<p>Small businesses are critically important to minority communities because they are a lifeline for providing jobs, services and opportunities for those persons that live in these communities. As such, we advance this proposal to promote an initiative that seeks to better prepare these businesses to succeed in the current COVID-19 pandemic as well as to prosper beyond it.</p> <p>St. Thomas University has operated in Miami Gardens for the last 60 years. Since 1961, the private, non-profit university has served our local community and its diverse population by providing high quality, accredited education, undergraduate research opportunities, and sports programs that the community rallies behind. The school also hosts many community events to encourage local students to pursue high education endeavors, such as multiple K-12 robotics competitions, science fairs, and nature events.</p> <p>Having both undergraduate and graduate programs, St. Thomas University prides itself in fostering bright young minds to make lasting impacts in our South Florida community, constantly participating in international research symposia, workshops, and conferences. One of these programs is the Summer Research Institute (SRI), where St. Thomas invites Miami-Dade College students to participate in collaborative STEM research that positively impacts our shared community. If awarded, the proposed project will have the platform of the SRI where students, researchers, and faculty that work in Miami Gardens and the surrounding areas will provide groundbreaking and novel research in tactical decision making for disaster preparedness and response.</p> <p>In addition, through the efforts of our Center for Pandemic Disaster and Quarantine Research at St. Thomas University ("PDQ at STU"), we have gained a first-hand view of many of the challenges facing minority businesses. In the course of working with minority businesses to provide business grants to help them through COVID-19, we learned that many of them need help with maintaining sufficient accounting records and financial statements, understanding how to apply for government assistance programs, obtaining necessary insurance coverage, documenting their business activity for the completion of tax returns, understanding best practices for business activities, and most importantly, struggling to improve low credit scores.</p> <p>We plan to use our PDQ at STU as a tool to leverage the comprehensive expertise within our Colleges of Law and Business to bolster South Florida's small businesses with the analysis and support they need to prepare for and navigate through future crises.</p>		
Project Purpose:	<p>The proposed project focuses utilizing both big data analysis and data literacy to propose and implement solutions to mitigate against business interruption in South Florida's small business community. The recent COVID-19 pandemic illustrated how ill-prepared America's small businesses were with business continuity plans and supply chain contingency planning.</p> <p>According to Professor Robert Fairlie's research article entitled, "The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions," minority businesses were hit especially hard during the initial stages of the COVID-19 pandemic. Specifically, in the first three months of the pandemic, 41% of black businesses and 32% of Latinx businesses closed compared to only 17% for white businesses. Based on these numbers, black businesses failed at a rate that was approximately 2.5 times greater than that of white businesses; and, Latinx businesses failed at a rate that was almost 2 times greater than white businesses. These statistics highlight a very troubling reality that this project seeks to help address.</p> <p>Miami-Dade County's business community is made up of more than 90,000 businesses, the majority of which are minority-owned, and are in industry sectors, like hospitality and tourism, that have been deeply impacted by COVID-19. Throughout the past fifteen months as these businesses have attempted to access financial remedies--such as grants and loans offered by federal, state, and local entities--many of them were unsuccessful because they were ill-prepared. Specifically, they did not have the expertise to access capital and credit, prepare their taxes, develop business continuity plans, and file and maintain requisite compliance documentation with local and state agencies.</p> <p>This project will utilize data analysis, state-of-the-art technology, human capital intellect and the brain-trust of the university as well as available clinical, operations analysis, process improvement, and policy development resources at St. Thomas University to support South Florida's small business community with data literacy and other tools that will support their crisis planning, preparedness and response.</p>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami Gardens	Project State:	FL
Recipient Name:	St. Thomas University	Recipient Mailing Address:	16401 NW 37th Avenue, Miami Gardens, FL 33054



June 15, 2021

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Data-Informed Tactical Decision-Making: Emergency Planning, Preparedness, and Response Execution for South Florida's Small Business Community in fiscal year 2022. The entity to receive funding for this project is St. Thomas University located at 16401 NW 37th Avenue, Miami Gardens, FL 33054.

The funding would be used to utilize both big data analysis and data literacy to propose and implement solutions to mitigate against business interruption in South Florida's small business community. The recent COVID-19 pandemic illustrated how ill-prepared America's small businesses were with business continuity plans and supply chain contingency planning.

According to Professor Robert Fairlie's research article entitled, "The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions," minority businesses were hit especially hard during the initial stages of the COVID-19 pandemic. Specifically, in the first three months of the pandemic, 41% of black businesses and 32% of Latinx businesses closed compared to only 17% for white businesses. Based on these numbers, black businesses failed at a rate that was approximately 2.5 times greater than that of white businesses; and, Latinx businesses failed at a rate that was almost 2 times greater than white businesses. These statistics highlight a very troubling reality that this project seeks to help address.

Miami-Dade County's business community is made up of more than 90,000 businesses, the majority of which are minority-owned, and are in industry sectors, like hospitality and tourism, that have been deeply impacted by COVID-19. Throughout the past fifteen months as these businesses have attempted to access financial remedies--such as grants and loans offered by



federal, state, and local entities—many of them were unsuccessful because they were ill-prepared. Specifically, they did not have the expertise to access capital and credit, prepare their taxes, develop business continuity plans, and file and maintain requisite compliance documentation with local and state agencies.

This project will utilize data analysis, state-of-the-art technology, human capital intellect and the brain-trust of the university as well as available clinical, operations analysis, process improvement, and policy development resources at St. Thomas University to support South Florida's small business community with data literacy and other tools that will support their crisis planning, preparedness and response.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,



Frederica S. Wilson  
Member of Congress



**Request ID: 104**

Project Name:	Neural-enabled Prosthetics: Virtual and Remote Reality	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$3,000
Justification:	<p>This request will allow FIU to support the Department of Defense's mission in meeting the needs and improving the quality of life of our servicemembers. Our researchers are leaders in this space and have been successful in restoring sensation and activation of the nervous system. Beyond the 1.5 million veterans in the South Florida community and nearly 20 million veterans nationwide, this request will also benefit thousands more Americans impacted by limb loss. Restoring sensation will mean a better of quality of life for all amputees. Additionally, this project will develop pipelines of undergraduate talent from Miami, Florida's HBCU into the graduate programs at the community's Hispanic-Serving Institution, Florida International University.</p>		
Project Purpose:	<p>When we interact in a virtual environment with people or machines, we only have visual interaction. What if we could feel people and objects as we interact with them in virtual or remote environments? This project will develop wearable soft-robotic technology and advancements to our patent-pending system for non-invasive electrical stimulation of peripheral-nerve to provide intuitive haptic feedback during manipulation and interactions within virtual, augmented, remote, and real-world environments. Without the cumbersome restrictions of traditional haptic hardware, the human-machine interaction offered by our advanced technologies will allow vastly improved social interactions within virtual worlds, realistic human-machine interactions in gaming, training and readiness of soldiers for remote control of unmanned aerial and terrestrial vehicles designed to minimize risk to civilian and military personnel during unsafe activities such as emergency rescue and firefighting missions or transportation and disposal of explosives or dangerous substances, and for robotic surgical procedures and rehabilitation training after neurological trauma. Specific, project objections include:</p> <ul style="list-style-type: none"> <li>• Delivering haptic feedback for teleoperation of complex surgical robotic devices, as well as remote control of unmanned aerial and terrestrial vehicles designed to minimize risk to civilian and military personnel during unsafe activities from emergency rescue, and firefighting missions, to transport and disposal of explosives or dangerous substances.</li> <li>• For individuals with amputation, replacement haptic feedback in accordance with the stimulation technology could be implemented in training environments to help improve the functionality of prosthetic limbs, enabling them to classify the physical properties of different objects, and perform fine control of grasp force outputs without the need for visual or auditory feedback.</li> <li>• Creating enhanced situational awareness of soldiers operating in the battlefield.</li> </ul>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami-Dade	Project State:	FL
Recipient Name:	Florida International University	Recipient Mailing Address:	11200 SW 8 Street Miami, FL 33199



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Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Neural-enabled Prosthetics: Virtual and Remote Reality in fiscal year 2022. The entity to receive funding for this project is Florida International University located at 11200 SW 8 Street Miami, FL 33199.

The funding would be used for neural-enabled prosthetics. When we interact in a virtual environment with people or machines, we only have visual interaction. What if we could feel people and objects as we interact with them in virtual or remote environments? This project will develop wearable soft-robotic technology and advancements to our patent-pending system for non-invasive electrical stimulation of peripheral-nerves to provide intuitive haptic feedback during manipulation and interactions within virtual, augmented, remote, and real-world environments. Without the cumbersome restrictions of traditional haptic hardware, the human-machine interaction offered by our advanced technologies will allow vastly improved social interactions within virtual worlds, realistic human-machine interactions in gaming, training and readiness of soldiers for remote control of unmanned aerial and terrestrial vehicles designed to minimize risk to civilian and military personnel during unsafe activities such as emergency rescue and firefighting missions or transportation and disposal of explosives or dangerous substances, and for robotic surgical procedures and rehabilitation training after neurological trauma. Specific, project objections include:

- Delivering haptic feedback for teleoperation of complex surgical robotic devices, as well as remote control of unmanned aerial and terrestrial vehicles designed to minimize risk to civilian and military personnel during unsafe activities from emergency rescue, and firefighting missions, to transport and disposal of explosives or dangerous substances.

- For individuals with amputation, replacement haptic feedback in accordance with the stimulation technology could be implemented in training environments to help improve the functionality of prosthetic limbs, enabling them to classify the physical properties of different objects, and perform fine control of grasp force outputs without the need for visual or auditory feedback.
- Creating enhanced situational awareness of soldiers operating in the battlefield.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,



Frederica S. Wilson  
Member of Congress

Request ID: 106			
Project Name:	HBCU Training for the Future of Aerospace	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$1,000
Justification:	The U.S. is currently dealing with shortages of both pilots and air traffic controllers, the latter due to early retirements and retention issues brought on by the stresses of the job. Additionally, the aviation industry is grappling with methods to improve inclusion and diversity. 92.3% of aircraft pilots and flight engineers in the U.S. are Caucasian, according to Data USA, and 93% are male. As the aviation industry strives to address a skills gap and the overall population becomes increasingly diverse, cultivating diversity and a culture of inclusion is likely to remain a key tenant for successful organizations and the military in the coming years.		
Project Purpose:	The goal is to help fill the shortages in "pilots and air traffic controllers" in the nation and around the world, while maximizing diversity initiatives in line with administration priorities. The local communities will improve because better opportunities will be provided while safety is improved in aerospace. The objectives for "Training for the Future of Aerospace program" include: (1) bachelor degrees in Aeronautical Science – Flight Education, and Air Traffic Control, and (2) FAA Flight Certificates up to Certified Flight Instructor CFI (3) Preparation for FAA on job training (OJT) start their careers in military or civilian spaces.		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami Gardens	Project State:	FL
Recipient Name:	Florida Memorial University	Recipient Mailing Address:	15800 NW 42nd Ave, Miami Gardens, Florida 33054



June 15, 2021

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for HBCU Training for the Future of Aerospace in fiscal year 2022. The entity to receive funding for this project is Florida Memorial University located at 15800 NW 42nd Ave, Miami Gardens, Florida 33054.

The funding would be used to help fill the shortages in "pilots and air traffic controllers" in the nation and around the world, while maximizing diversity initiatives in line with administration priorities. The local communities will improve because better opportunities will be provided while safety is improved in aerospace. The objectives for "Training for the Future of Aerospace program" include:

- (1) Bachelor degrees in Aeronautical Science – Flight Education, and Air Traffic Control;
- (2) FAA Flight Certificates up to Certified Flight Instructor CFI; and
- (3) Preparation for FAA on job training (OJT) start their careers in military or civilian spaces.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in blue ink that reads "Frederica S. Wilson". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Frederica S. Wilson  
Member of Congress

**Request ID: 108**

Project Name:	Florida Memorial University Department of Natural Sciences STEM Equipment	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$400
Justification:	<p>The purpose of this request is to provide equipment and instrumentation, as well as personnel to train students in STEM-based laboratories and hands-on research, which would translate to an increase in persistence, retention, and graduation of students who would then either enter the workforce or enter graduate/professional programs in STEM disciplines. FMU's HNS has forged and will continue to forge relationships with the surrounding community. The relationships can be strengthened if a significant amount of time and money is provided to create a culture of STEM education in the surrounding communities.</p>		
Project Purpose:	<p>All STEM/Health and Natural Sciences (HNS) students should have access to a robust science, technology, engineering, and mathematics (STEM) education at Florida Memorial University (FMU). This is a goal in which equitable educational opportunities must be provided for all students to succeed as they matriculate through FMU, into STEM careers, and become a global citizen in their professional and private life as they contribute to society in a positive and meaningful manner. To further the goal of high-quality STEM education for all, FMU's HNS seeks financial aid in an effort to train students in the use of modern research-based methods and use of technologies that shall make them competitive upon graduation or well-trained to enter successfully STEM graduate disciplines. Therefore, the purpose of this prospectus is to inform granting agencies of the need for funds to support innovative, equity-focused STEM education strategies via obtaining instrumentation to improve hands-on research, the use of modern equipment, and project-based learning. In order to help FMU increase the competitiveness of its STEM graduates in either the workforce or in STEM graduate disciplines, the funding agencies can help support our efforts to improve STEM (practical) instruction and research, which would increase student outcomes in STEM fields, mainly by increasing persistence, retention, and graduation rates, as well as increased entry as qualified workers into the diverse and ever-growing STEM workforce.</p> <p>Florida Memorial University requests \$400,000 in order to support students and faculty to attain quality training through the procurement of up-to-date equipment and instrumentation, as well as providing basic equipment to run undergraduate laboratories and help students develop critical thinking skills through early exposure to hands-on research.</p>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami Gardens	Project State:	FL
Recipient Name:	Florida Memorial University	Recipient Mailing Address:	15800 NW 42nd Ave, Miami Gardens, Florida 33054



June 15, 2021

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Florida Memorial University Department of Natural Sciences STEM Equipment in fiscal year 2022. The entity to receive funding for this project is Florida Memorial University located at 15800 NW 42nd Ave, Miami Gardens, Florida 33054.

The funding would be used to provide STEM/Health and Natural Sciences (HNS) students should with access to a robust science, technology, engineering, and mathematics (STEM) education at Florida Memorial University (FMU). This is a goal in which equitable educational opportunities must be provided for all students to succeed as they matriculate through FMU, into STEM careers, and become a global citizen in their professional and private life as they contribute to society in a positive and meaningful manner. To further the goal of high-quality STEM education for all, FMU's HNS seeks financial aid in an effort to train students in the use of modern research-based methods and use of technologies that shall make them competitive upon graduation or well-trained to enter successfully STEM graduate disciplines. Therefore, the purpose of this prospectus is to inform granting agencies of the need for funds to support innovative, equity-focused STEM education strategies via obtaining instrumentation to improve hands-on research, the use of modern equipment, and project-based learning. In order to help FMU increase the competitiveness of its STEM graduates in either the workforce or in STEM graduate disciplines, the funding agencies can help support our efforts to improve STEM (practical) instruction and research, which would increase student outcomes in STEM fields, mainly by increasing persistence, retention, and graduation rates, as well as increased entry as qualified workers into the diverse and ever-growing STEM workforce.

Florida Memorial University requests \$400,000 in order to support students and faculty to attain quality training through the procurement of up-to-date equipment and instrumentation, as well as

providing basic equipment to run undergraduate laboratories and help students develop critical thinking skills through early exposure to hands-on research.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,



Frederica S. Wilson  
Member of Congress



**Request ID: 109**

Project Name:	Florida Memorial Avionics Smart Scholars	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$1,000
Justification:	Technology and digitization bring many advantages to aviation, but at the same time, create challenges in managing cyber vulnerabilities in this complex environment. The airline industry is an attractive target for cyber threat actors with a multitude of motivations, ranging from stealing value in data or money to causing disruptions and harm. It is necessary to continue building a pipeline of security experts to manage the ever-changing landscape of those who would do us harm.		
Project Purpose:	Funding will provide Florida Memorial University funding for four-year funding for up to 8 Smart Scholars through the Department of Defense's smart scholarship program. The focus of these scholarships will be on Aerospace Cybersecurity in the commitment to Aviation safety. These Smart Scholars should be provided mentorship at the Air Force Technical Applications Center at Patrick AFB.		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami Gardens	Project State:	FL
Recipient Name:	Florida Memorial University	Recipient Mailing Address:	15800 NW 42nd Ave, Miami Gardens, Florida 33054



June 15, 2021

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for Florida Memorial Avionics Smart Scholars in fiscal year 2022. The entity to receive funding for this project is Florida Memorial University located at 15800 NW 42nd Ave, Miami Gardens, Florida 33054.

The funding would be used to provide Florida Memorial University funding for four-year funding for up to 8 Smart Scholars through the Department of Defense's smart scholarship program. The focus of these scholarships will be on Aerospace Cybersecurity in the commitment to Aviation safety. These Smart Scholars should be provided mentorship at the Air Force Technical Applications Center at Patrick AFB.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in blue ink that reads "Frederica S. Wilson". The signature is written in a cursive, flowing style.

Frederica S. Wilson  
Member of Congress

Request ID: 111			
Project Name:	HIV/AIDS Research as Centers for AIDS Research	Request Nature:	Community Project Funding
Member Name:	Wilson, Frederica S.(D-FL)	Member's Request: (in thousands, \$000)	\$2,000
Justification:	<p>Of 17 CFARs nationwide. Miami CFAR is the first and only CFAR in Florida. Over 65% of all AIDS-related research in the United States is conducted in affiliation with a CFAR, and funding supports a clinical research unit at Jackson Memorial Hospital which</p> <p>facilitates the inclusion of underrepresented individuals in clinical research studies</p> <p>that provide access to cutting edge therapies.</p> <p>Recently, funds have been used to support an innovative line of research that equips a</p> <p>harmless virus (called AAV) with proteins that attack the AIDS virus. Researcher's novel cure strategy was successful in curing a few monkeys of HIV, including the famous 'Miami Monkey'</p>		
Project Purpose:	<p>Funding for the HIV/AIDS Research Initiative at the Center for AIDS Research supports and enhances collaboration amongst institutions throughout Florida and the U.S. to significantly advance high-quality HIV/AIDS research. In an effort to better understand, prevent, and treat HIV infection and AIDS associated malignancies, funding invests in collaborative pilot grants amongst medical and academic institutions aimed at developing a vaccine against HIV/AIDS and an ultimate cure for HIV/AIDS.</p> <p>Through the collaboration of our various scientific disciplines and diverse expertise, promotion of education and mentorship programs, and partnering with community organizations, Miami CFAR aims to participate in the initiative to End the HIV Epidemic by implementing strategies to Diagnose, Treat, Prevent, and Respond.</p> <p>Of 17 CFARs nationwide. Miami CFAR is the first and only CFAR in Florida.</p>		
Member Website Link:	<a href="http://www.wilson.house.gov/ndaa-projects">http://www.wilson.house.gov/ndaa-projects</a>		
Project City or County:	Miami	Project State:	FL
Recipient Name:	University of Miami	Recipient Mailing Address:	1120 NW 14th Street, Miami, FL 33136



June 15, 2021

The Honorable Adam Smith  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

The Honorable Mike Rogers  
Ranking Member  
Committee on Armed Services  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Chairman Smith and Ranking Member Rogers:

I am requesting funding for HIV/AIDS Research as Centers for AIDS Research in fiscal year 2022. The entity to receive funding for this project is University of Miami located at 1120 NW 14th Street, Miami, FL 33136.

The funding would be used for the HIV/AIDS Research Initiative at the Center for AIDS Research supports and enhances collaboration amongst institutions throughout Florida and the U.S. to significantly advance high-quality HIV/AIDS research. In an effort to better understand, prevent, and treat HIV infection and AIDS associated malignancies, funding invests in collaborative pilot grants amongst medical and academic institutions aimed at developing a vaccine against HIV/AIDS and an ultimate cure for HIV/AIDS.

Through the collaboration of our various scientific disciplines and diverse expertise, promotion of education and mentorship programs, and partnering with community organizations, Miami CFAR aims to participate in the initiative to End the HIV Epidemic by implementing strategies to Diagnose, Treat, Prevent, and Respond.

Of 17 CFARs nationwide. Miami CFAR is the first and only CFAR in Florida.

I certify that neither I nor my immediate family has any financial interest in this project.

Sincerely,

A handwritten signature in blue ink that reads "Frederica S. Wilson". The signature is written in a cursive, flowing style.

Frederica S. Wilson  
Member of Congress